Löffler and Frosch, in 1898, in studying the foot-and-mouth disease of cattle, found that the virus could be passed through a filter. In the mosaic disease of tobacco, Iwanowski saw amoeba-like bodies which, because of their large size, he concluded could not cause the disease. In 1921, amoeba-like bodies were found associated with the mosaic disease of corn. There is great uncertainty about the nature of these bodies. When fixed and stained they have a structure similar to that of protoplasm, but until they have been shown to contain nuclei, to be capable of vital movement or have been grown in pure culture or demonstrated to be related to some known organism we shall have to reserve judgment as to whether or not they represent a stage in the life cycle of a living organism.

All the evidence indicates that the causal agent is very small. Its discovery and demonstration may have to await the production of a better microscope than we now possess.

Arthur H. Graves, Secretary.

TORREY BOTANICAL CLUB FIELD DAY

HESTER M. RUSK

To celebrate the fiftieth anniversary of the joining of the Club by Dr. N. L. Britton and Dr. Arthur Hollick, a Torrey Botanical Club Field Day was held on June 25, 1927, at Bay Terrace and Great Kills, Staten Island. In the morning a party of about fifty members and friends of the Club, led by Dr. Britton and Dr. Hollick, joined in a field trip on which many interesting plants of the region were pointed out.

Addressing the meeting at the ruins of the former residence of Mr. John J. Crooke (Mr. Crooke died here on April 11th, 1911, in the eighty-eighth year of his age), near Bay Terrace, Dr. Britton called attention to the important services rendered by Mr. Crooke to science during his long life. He was a charter member of the Torrey Botanical Club and an intimate friend of Dr. Torrey; he accumulated here large and valuable collections of shells, birds, minerals and plants, and an extensive library; at about the time of Dr. Torrey's death in 1873, he presented to Columbia College, the valuable general herbarium

of the Swiss Professor Meisner, and another large herbarium formed by Dr. Chapman, of Apalachicola, Florida, illustrating the flora of the southeastern United States; his own herbarium was subsequently given to The New York Botanical Garden; his collection of birds, shells and minerals passed to the American Museum of Natural History. He is commemorated in Botany by the genus *Crookea* of the Hypericaceae, dedicated to him by Dr. Small in 1903.

Dr. Britton described his boyhood intimacy with Mr. Crooke, and his visits here at frequent intervals from his birthplace and home at New Dorp, three miles away. It was this acquaintance that led Dr. Britton to prepare for the School of Mines of Columbia College, where he began his course of study in 1875. Mr. Crooke told him much about Dr. Torrey and his herbarium, and also of the organization, called the Torrey Botanical Club, founded a few years previously.

Mr. W. T. Davis added some of his own personal reminiscences of Mr. Crooke, and read aloud the biographical article which he wrote in 1911.* Mr. C. W. Leng followed with a few words about Mr. Crooke's gifts of valuable specimens to the American Museum of Natural History.

Dr. and Mrs. Britton and Miss Harriet Louise Britton entertained the party at luncheon at the home of Mr. R. H. Britton on the water front at Great Kills. After luncheon Dr. Britton read from the minutes of the Torrey Botanical Club meeting of June 26, 1877, as follows: "C. A. Hollick, C. Van Brunt, N. L. Britton were elected active members." Mr. Hollick had been nominated by Mr. G. W. Wright, Mr. Van Brunt by Mr. W. R. Gerard, and Mr. Britton by Mr. Wright. The last was principal of a school at New Brighton, and knew Dr. Britton and Dr. Hollick as boys.

The next speaker, Dr. Hollick, remarked on the inaccuracy of memory and the value of written records made at the time of occurrences, not only for facts, but also for impressions. He read extracts from his diary of fifty years ago, giving his youthful impressions of the early events of his scientific career, which was and has ever since been closely connected with that of Dr. Britton. He mentioned Dr. Britton's first published note

^{*} Davis, William T. John J. Crooke: a Staten Island naturalist. Proc. Staten I. Assoc. 3: 169–172. 1911.

on sedges, in the Torrey Bulletin for May, 1879.* To another, published in April, 1880,† Dr. Hollick contributed the drawings—the third plate that had appeared in the Bulletin. Dr. Hollick's second published drawing was the first colored plate in the Bulletin, an illustration of *Cerastium arvense*, for his and Dr. Britton's article on that species—March, 1887.‡ Dr. Britton and Dr. Hollick worked for several years on their Flora of Staten Island printed in February, 1879. Seven appendices were published in the following years. Dr. Hollick read some interesting and complimentary press notices on this early work, and announced that a joint revision of the Staten Island Flora is nearly ready for printing.

Dr. Hollick's talk was followed by a few words from Dr. J. H. Barnhart, Mrs. N. L. Britton, Mr. L. L. Tribus and Hon. H. R. Bayne, president of the Staten Island Institute of Arts and Sciences. Mr. John Enequist proposed a vote of thanks to Dr. and Mrs. Britton and Mr. and Miss Britton and Dr. Hollick, to which everyone present most heartily responded. Assuredly the day was a most memorable one to the members of the Torrey

Club and other guests.

About 85 persons participated in the event, mostly from the Torrey Botanical Club and the trustees of the Staten Island Institute of Arts and Sciences. Brother León of the College of La Salle at Havana, Cuba, and Dr. J. N. Rose of the United States National Museum, were distinguished guests.

NEWS NOTES

From the Newark Museum we have learned that early in May a rare member of the Gentian family, *Obolaria virginica*, was found near Hillside, N. J. by Mr. George H. Swezey. The New Jersey State Report gives but four localities for the species, in all of which it is rare.

‡ Hollick, Arthur, and N. L. Britton. Cerastium arvense L., and its North American varieties. Bull. Torrey Bot. Club 14: 45-51. 1887.

§ Hollick, Arthur, and N. L. Britton. The flora of Richmond Co., N. Y. Published by the authors. Staten Island. 1879.

^{*} Bull. Torrey Bot. Club **6**: 316. 1879.

[†] Britton, N. L. Note on the differences between Cyperus ovularis Torr., and C. cylindricus N. L. Britton. Bull. Torrey Bot. Club 7: 48. 1880.

We have received a copy of numbers 3 and 4 of the first volume of Werenda, published by Wilhelm Suksdorf in Bingen, Washington. The pamphlet, which is written in German, describes some twenty five new species and a number of new varieties of plants found in Washington. The species described belong to the genera Panicum Corallorrhiza, Spiraea, Amelanchier Prunus, Viola, Epilobium, Sanicula, Apocynum, Amsinckia, Nicotiana, Mimulus, Symphoricarpos, Aster, and Plectritis. In addition there is a key to the species of Amsinckia.

Representatives of many leading European agricultural organizations arrived at Washington the week of June 13 to study economic conditions in this country, and to make a 60-days tour of American agricultural regions. The group composed of officials from 12 European countries was escorted to the United States by Asher Hobson, Permanent American Delegate to the International Institute of Agriculture at Rome.

An international meeting of the European representatives and officials of the Department of Agriculture for an interchange of information on world agriculture was held at Washington by the Bureau of Agricultural Economics during the visit of the foreign agricultural delegates.

After a few days spent in attendance at the First International Congress of Soil Science in Washington, these delegates made a 60-days tour of the United Statesstudying agricultural conditions, including a 2-days stop at the Institute of Cooperation in Chicago. They participated also in the Country Life Conference at East Lansing, Michigan, August 1–6.

The Brooklyn Botanic Garden announces a gift of \$10,000 from Mr. and Mrs. Walter J. Cranford of Greenwich, Connecticut, formerly of Brooklyn, for the installation of a new rose garden as a memorial to a little child. The garden will cover about three quarters of an acre. The plan provides not only for the display of the so-called bedding or garden roses that will grow out-of-doors, and for demonstration of the varied possibilities of climbing roses, post roses, and standards, but also for as complete collections as can be obtained of wild or natural species of roses, showing their foliage and massing qualities. Old fashioned and historical roses will also be featured.

Following one of the provisions of the act of the last Congress establishing a National Arboretum at Washington, Secretary of Agriculture Jardine has announced the membership of the Advisory Council, which is to plan and develop the arboretum. The members are Frederic A. Delano, Washington, D. C., member of the Board of Regents of the Smithsonian Institution, Chairman; L. H. Bailey, Ithaca, New York, president of the Botanical Society of America; Henry S. Graves, New Haven, Conn., Dean of the School of Forestry, Yale University; Harlan P. Kelsey, Salem, Mass., former president of the American Association of Nurserymen; John C. Merriam, president of the Carnegie Institution of Washington; Mrs. Frank B. Noyes, Washington, D. C., chairman of the District of Columbia committee of the Garden Club of America; Frederick Lew Olmsted, Brookline, Mass., former president of the American Society of Landscape Architects; Mrs. Harold I. Pratt, Glen Cove, L. I., secretary of the Garden Club of America; Robert Pyle, West Grove, Pa., director of the Society of American Florists and Ornamental Horticulturists and a former president of the American Rose Society.

Dr. T. D. A. Cockerell of the University of Colorado, who is on a botanical trip through Europe and Asia, reached Leningrad the middle of July. Professor Komaroff, a most enthusiastic botanist, was his host in visiting the botanic gardens and library. The gardens are very fine and are being partly made over and enlarged. Palms and other tropical plants grow in the green houses, while many arctic plants are found in the rockeries.

Dr. Cockerell stopped in Moscow, then went on across to Siberia to Irkutsk and Lake Baikal. At the latter place he spent some time in the new research laboratory supported by the University of Irkutsk.

Dr. Bruce Fink, an authority on lichens and for over twenty years professor of botany at Miami University, Oxford, Ohio, died suddenly on July 16 in his sixty-sixth year.

Dr. William H. Eyster, professor of botany at Bucknell University, sailed on August 20 for Germany. He will spend a year in study there as a fellow of the John Simon Guggenheim Memorial Foundation.